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EXAMINER

LAMB, BRENDA A

ART UNIT

PAPER NUMBER

1734

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/743,938

Applicant(s)

FUCHS ET AL.

Examiner

Brenda A. Lamb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8-11,13,14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 13 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 9-11 and 14 is/are rejected.
- 7) ☒ Claim(s) 8 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 6, 9-11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over German 4237962 in view of Cohn et al 3,692,465 (hereinafter referred to as Cohn et al '465).

German '962 teaches the design of a sizing apparatus for sizing a warp yarn sheet which is comprised of the following elements: a size compartment for contacting the warp yarn sheet with size; a squeezer/mangler for squeezing the sized warp yarn sheet; means for wetting the sized warp yarn sheet with water; and means for squeezing the pre-wetted warp yarn sheet. German '962 fails to teach the combination of wetting means and wetting agent squeezer which as claimed by applicant is a draw-in unit which is comprised of three rollers forming in the conveying direction of the yarn

sheet a first squeezing gap and a second squeezing gap. However, Cohn et al '465 shows in Figure 1 a wetting/dipping and squeezing/sizing roller unit which is comprised of the following elements: a first and second roller (elements 13, 14) forming a first squeezing gap 16, second roller (element 14) disposed for travel of continuous substrate sheet there-around and through the treating liquid and second and third roller (elements 14, 15) forming a second squeezing gap 17 (see column 3 lines 39-65). Cohn et al '465 infers at column 3 lines 61-65 that idler roll 20 is optional. German '962 shows the yarn sheet is conveyed unsupported between the first roller of the sizing compartment and the last roller in the traveling direction of the wetting and squeezing roll unit. Therefore, it would have been obvious to modify the German '962 apparatus by substituting its wetting and squeezing /sizing roller unit with another wetting and squeezing /sizing roller unit such as taught by Cohn et al '464 as shown in Figure 1 for the obvious advantage of structural compactness. Further with respect to claim 9, the recitation that the draw-in unit is comprised of a set of rollers consisting essentially of three roller does not define applicant's invention over the above cited references above given the German '962 as modified with Cohen et al '465 wetting and squeezing/sizing roller unit since as discussed above Cohen et al '465 infers that idler roll 20 is optional. With respect to claims 3 and 11, Cohn et al '465 shows the second and third roller are arranged in the manner set forth in the instant claims. With respect to claims 2 and 10, Cohn et al '465 teaches a first wetting agent supply in a nip above the first squeezing gap between first and second rollers in the conveying direction of the yarn sheet. Cohn et al '465 teaches that the yarn sheet travels through the first wetting agent supply,

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through the first squeezing gap, along the surface of the second roller and through the wetting liquor supply below the second roller and finally through the second squeezing gap. With respect to claim 6 and 14, the same rejection applied to claim 2 and 10 is applied here. Further, Cohn et al '465 shows that the axes of the third roller is vertically above the second roller.

Applicant's arguments filed 7/1/2005 have been fully considered but they are not persuasive.

Applicant's argument that Cohn et al '465 fails to teach the claimed draw-in unit functions as a draw-in unit is found to be non-persuasive. Applicant has claimed a draw-in unit comprising three rollers and "said drawing unit including in the conveying direction of the yarn sheet a first and a second of said three rollers forming a first squeezing gap, means for wetting the yarn sheet with a liquor which is at least diluted with water prior to its contact with the sizing liquor including a wetting liquor supply disposed below said second roller, said second roller disposed for dipping into said wetting liquor supply for travel of said yarn sheet there-around through said wetting liquor supply, said second and third of said three rollers forming a wetting agent squeezer as a second squeezing gap" and Cohn et al '465 teaches every claimed structural limitation of the draw-in unit. In any event, Cohn et al teaches at column 4 lines 14-19 teaches that at least the second roller 14 and if desired all the three rollers of the wetting/dipping and squeezing/sizing roller unit are driven such that the Cohn et al '465 is capable of serving as a drawing-in unit.

Applicant's argument that Cohn et al '465 roller unit is used for web materials and not for yarn sheets is found to be non-persuasive. Cohn et al '465 roller unit is capable of treating a variety of continuous length substrates arranged in a manner so as to exhibit a defined width such as yarn sheets since the rollers 13-15 having an axial length so as to enable the rollers to convey and treat substrates exhibiting a defined width.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fuchs et al is cited for teaching that an apparatus for treating fabric web can also be used to treat yarn sheets (see column 1 lines 5-20 and column 4 lines 9-12).

Claims 8 and 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 5 and 13 is allowed.

The prior art fails to teach or suggest an device for sizing a yarn sheet being moved in a conveying direction, comprising at least one sizing compartment for contacting the yarn sheet with sizing liquor, a draw-in unit comprising three rollers connected upstream of the sizing compartment, and a squeezer for the sizing connected downstream of the sizing compartment, the draw-in unit including means for wetting the yarn in the sheet with a liquor which is at least diluted with water prior to its contact with the sizing liquor a first and a second of the three rollers forming a first squeezing gap, the second roller disposed for travel of the yarn sheet there-around

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through the wetting liquor, the second and third of the three rollers forming a wetting agent squeezer as a second squeezing gap, the draw-in unit thereby functioning as the wetting means and as the wetting agent squeezer the second roller and the third roller of the draw-in unit being arranged with their axes generally vertically above each other the yarn sheet being conveyed over a free segment from the surface of the third roller of the draw-in unit to the surface of a first roller of the sizing compartment, and the length of the free segment between the department of the yarn sheet from the third roller of the draw-in unit and the first roller of the sizing compartment being minimized because its compact structure, the free segment being protected against heat lost by means of a cover.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication should be directed to Brenda A Lamb  
at telephone number (571)-272-1231. The examiner can normally be reached on  
Monday and Wednesday thru Friday with alternate Tuesdays off.

*Brenda A. Lamb*  
BRENDA A. LAMB  
PRIMARY EXAMINER